

MSCI ACWI ESG Indexes

August 30, 2024

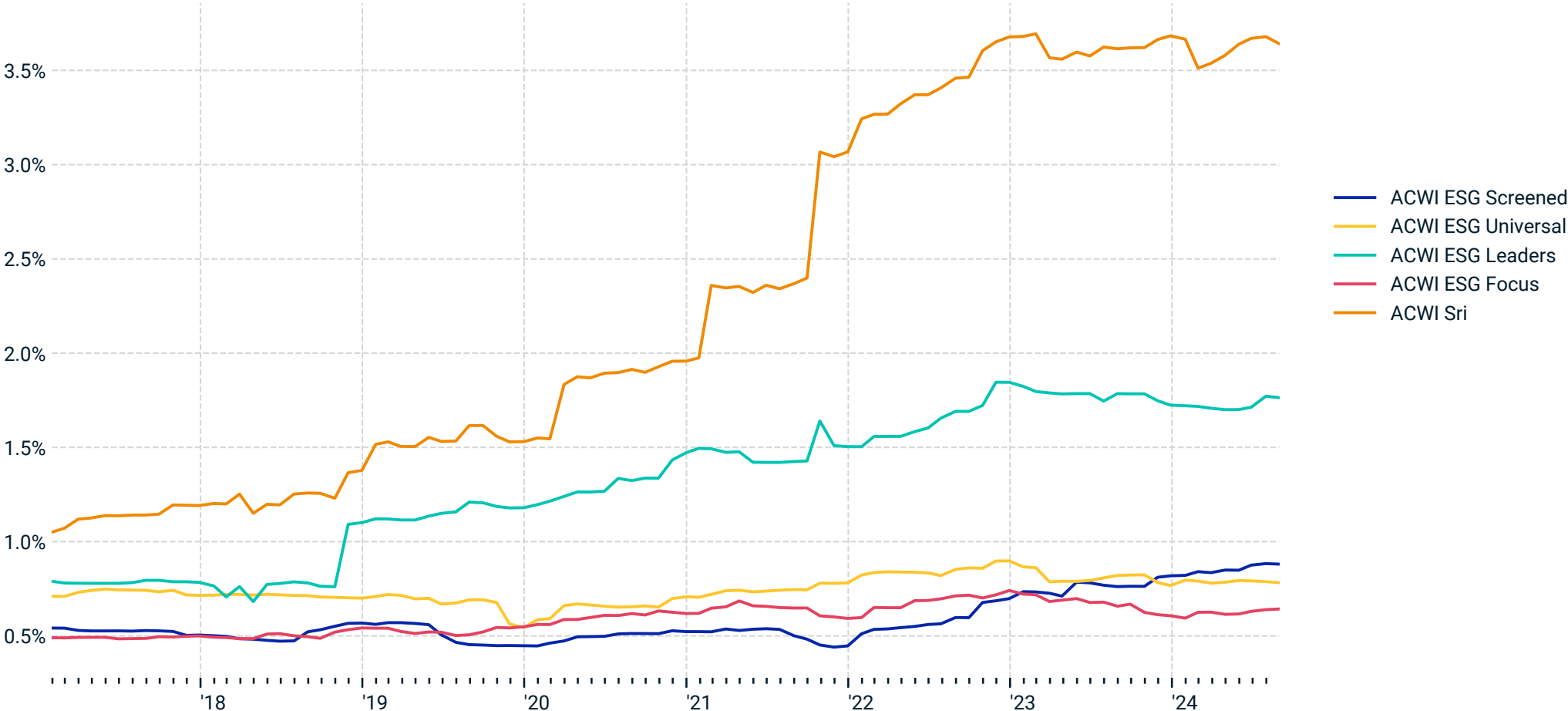
ESG Indexes - Key Metrics

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
Return Metrics						
1M	2.6	2.6	2.6	2.5	2.7	2.3
3M	6.6	6.8	6.8	6.1	7.1	8.2
YTD	16.3	16.7	17.1	16.5	16.3	13.2
1 Yr	23.7	24.6	24.6	23.5	23.1	21.0
5 Yr	12.7	13.1	13.3	12.8	12.8	13.4
Risk Metrics						
Total risk (%)	14.4	14.0	14.3	14.2	14.2	14.5
Tracking error (%)	0.0	0.6	0.9	1.3	0.6	2.3
ESG and Climate Metrics						
ESG Score	6.9	6.9	7.4	7.8	8.0	8.6
Implied Temperature Rise (°C)	3.0	2.8	2.9	2.7	2.7	2.7
Carbon Intensity to EVIC - Scope 1 + 2 + 3*	342	245	311	225	299	191
Number of Constituents						
Average number of constituents	2667	2508	2374	1176	523	575

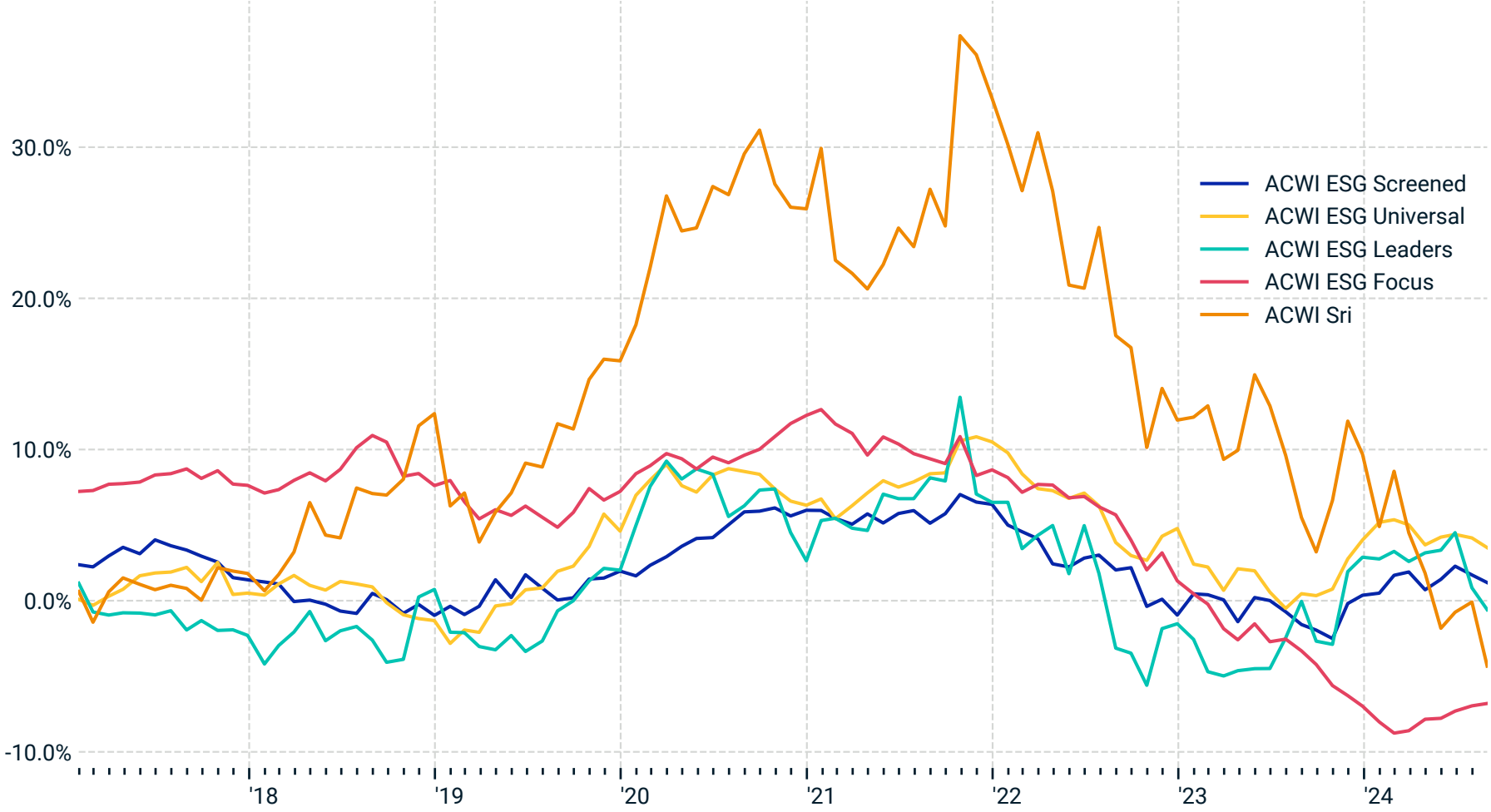
Gross returns in USD

As of August 30, 2024. *Wtd Avg tCO2e/\$M EVIC

3 Year Annualized Rolling Active Risk (%)



3 Year Annualized Rolling Active Return (%)



ESG Metrics

Integration, values and norms

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
Integration						
ESG score	6.9	6.9	7.4	7.8	8.0	8.6
ESG leaders (AAA-AA) (%)	44.7	45.6	60.7	69.2	71.3	83.2
ESG laggards (B-CCC) (%)	3.0	2.9	1.2	0.0	1.4	0.0
ESG trend positive (%)	12.4	12.7	11.5	10.2	10.6	7.3
ESG trend negative (%)	11.9	12.0	10.6	15.5	9.5	7.6
Index ESG rating	A	A	AA	AA	AA	AA
Environmental pillar score	6.1	6.2	6.2	6.5	6.6	6.5
Social pillar score	5.1	5.1	5.4	5.6	5.7	6.1
Governance pillar score	5.7	5.7	6.0	6.0	6.1	6.4
Values and norms						
Tobacco involvement (%)	0.8	0.0	0.7	0.3	0.1	0.0
Civilian firearms producers (%)	0.1	0.0	0.2	0.0	0.1	0.0
Ties to controversial weapons (%)	0.5	0.0	0.0	0.0	0.0	0.0
Global compact compliance violation (%)	0.2	0.0	0.0	0.0	0.0	0.0
Red flag controversies (%)	0.2	0.0	0.0	0.0	0.0	0.0
Orange flag controversies (%)	31.4	29.4	26.4	15.6	25.0	11.6

As of August 30, 2024.

Climate Metrics

Climate change

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
Climate footprint						
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	74	48	65	47	38	31
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	166	112	146	121	78	83
Wtd avg carbon intensity (t CO2e/\$M sales)	122	86	111	82	61	53
Low carbon transition risks						
Low carbon transition score	6.0	6.2	6.1	6.4	6.2	6.5
Solutions (%)	11.1	12.0	13.6	19.4	13.1	20.4
Product & operational transition (%)	20.9	18.1	19.7	15.2	17.9	14.3
Asset stranding (%)	2.0	1.3	1.8	1.7	1.9	1.6
Exposure to asset stranding risks						
Potential carbon emissions (t CO2e/\$M invested)	1260	447	1003	242	693	0
Fossil fuel reserves (%)	5.8	4.1	5.3	2.3	4.3	0.0
Thermal coal mining (%)	0.8	0.4	0.7	0.3	0.6	0.0
Thermal coal-based power generation (%)	2.7	1.7	2.6	0.5	0.6	0.4
Unconventional oil & gas extraction (%)	3.3	2.2	3.2	1.3	2.6	0.0
Exposure to clean technology solutions						
Clean technologies solutions (> 20% revenue)	12.8	13.7	15.4	20.7	14.4	22.2
Clean technologies solutions revenue (wtd avg %)	7.8	8.3	9.3	12.2	8.7	17.8
Green/fossil fuel-based net revenue exposure	4.5	15.1	5.5	29.9	7.8	233.0
Other climate metrics						
Exposure to carbon-related assets (%)	6.5	4.6	6.8	4.3	6.7	3.5
Climate-related controversies (% score ≤ 4)	4.1	2.6	3.7	1.3	2.8	0.7
Low carbon transition management score (% top quartile)	69.8	70.1	71.5	75.1	77.2	75.3

As of August 30, 2024.

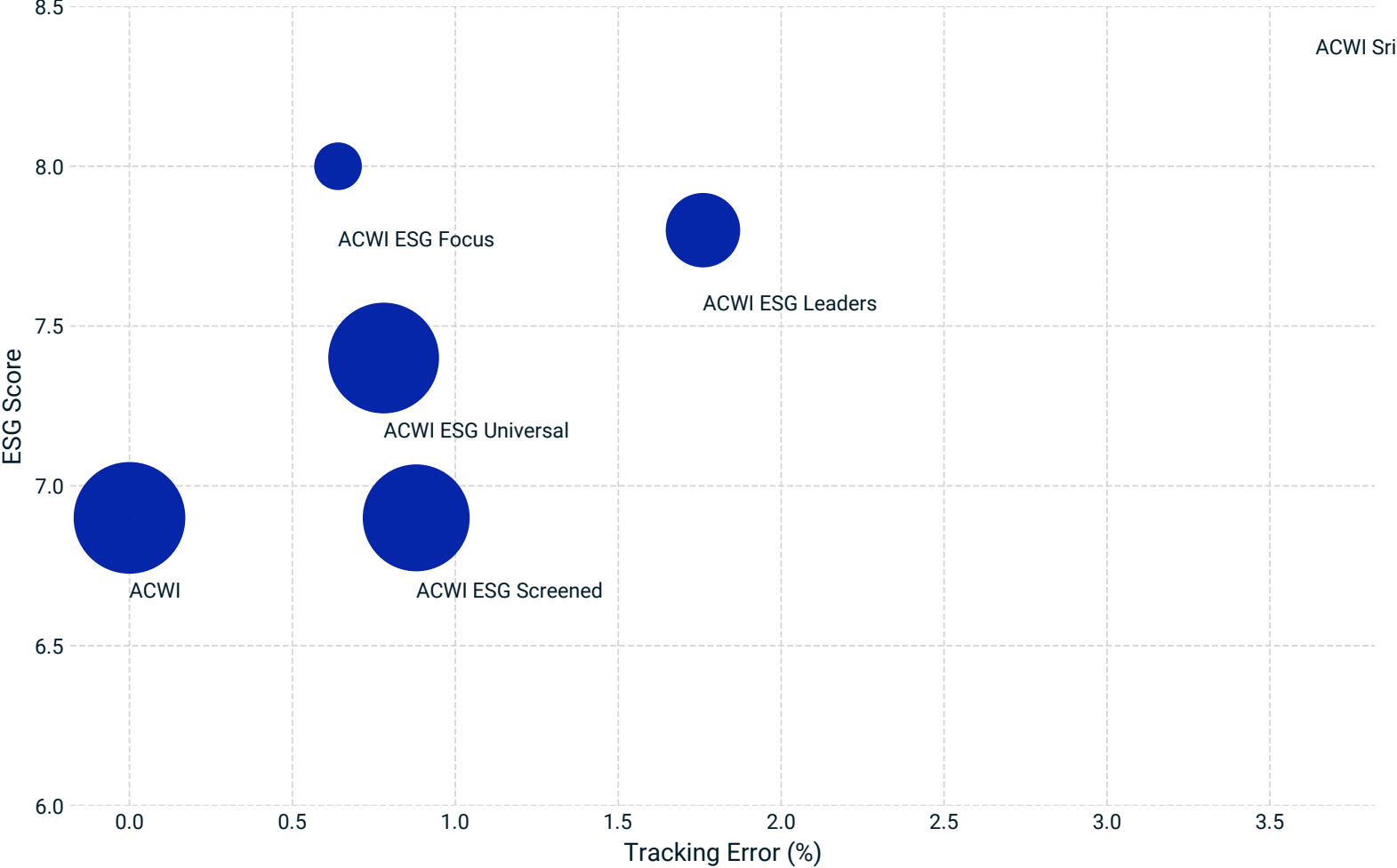
Climate Metrics

Climate change

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
Carbon Footprint						
Carbon Intensity to EVIC - Scope 1 + 2 + 3*	342	245	311	225	299	191
Carbon Intensity to EVIC - Scope 1 + 2*	46	32	42	29	27	22
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	166	112	146	121	78	83
Carbon Emissions to Sales - Scope 1 + 2 + 3**	796	621	735	585	613	536
Carbon Emissions to Sales - Scope 1 + 2**	122	86	111	82	61	53
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	74	48	65	47	38	31
Companies Reporting scope 12 emissions (%)	93.5	93.2	94.9	96.6	98.4	96.9
Fossil Fuel Exposure						
Potential carbon emissions (t CO2e/\$M invested)	1260	447	1003	242	693	0
Fossil fuel reserves (%)	5.8	4.1	5.3	2.3	4.3	0.0
Thermal coal mining (%)	0.8	0.4	0.7	0.3	0.6	0.0
Unconventional oil & gas extraction (%)	3.3	2.2	3.2	1.3	2.6	0.0
Low Carbon Transition Risk Assessment						
Low carbon transition score	6.0	6.2	6.1	6.4	6.2	6.5
Solutions (%)	11.1	12.0	13.6	19.4	13.1	20.4
Product & operational transition (%)	20.9	18.1	19.7	15.2	17.9	14.3
Asset stranding (%)	2.0	1.3	1.8	1.7	1.9	1.6

As of August 30, 2024. * Wtd Avg t CO2e/\$M EVIC** Wtd Avg t CO2e/\$M Sales

ESG Score vs. Tracking Error



GICS Sector Exposures

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
Communication services	7.5	8.2	5.6	8.6	6.8	4.2
Consumer discretionary	10.2	10.9	8.8	10.1	9.8	12.4
Consumer staples	6.4	3.9	6.4	6.1	6.3	6.4
Energy	4.2	3.1	4.2	2.8	4.6	1.8
Financials	16.2	17.5	16.6	15.6	16.5	16.7
Health care	11.4	12.3	11.5	11.8	11.2	11.3
Information technology	24.7	26.7	27.5	26.9	25.4	28.3
Industrials	10.6	9.8	10.6	10.2	11.5	10.6
Materials	4.0	3.6	3.8	4.1	3.7	3.9
Real estate	2.2	2.4	2.1	2.2	1.9	2.4
Utilities	2.6	1.8	2.9	1.7	2.2	2.1

As of Aug 30, 2024

Regional and Top Country Exposures

Regional Exposure

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
EM	10.0	10.2	8.7	10.3	9.2	10.9
Europe and Middle East	15.2	14.8	18.5	14.7	15.8	15.4
North America	67.2	67.2	64.0	67.3	66.5	65.5
Pacific	7.7	7.8	8.8	7.6	8.5	8.2

As of Aug 30, 2024

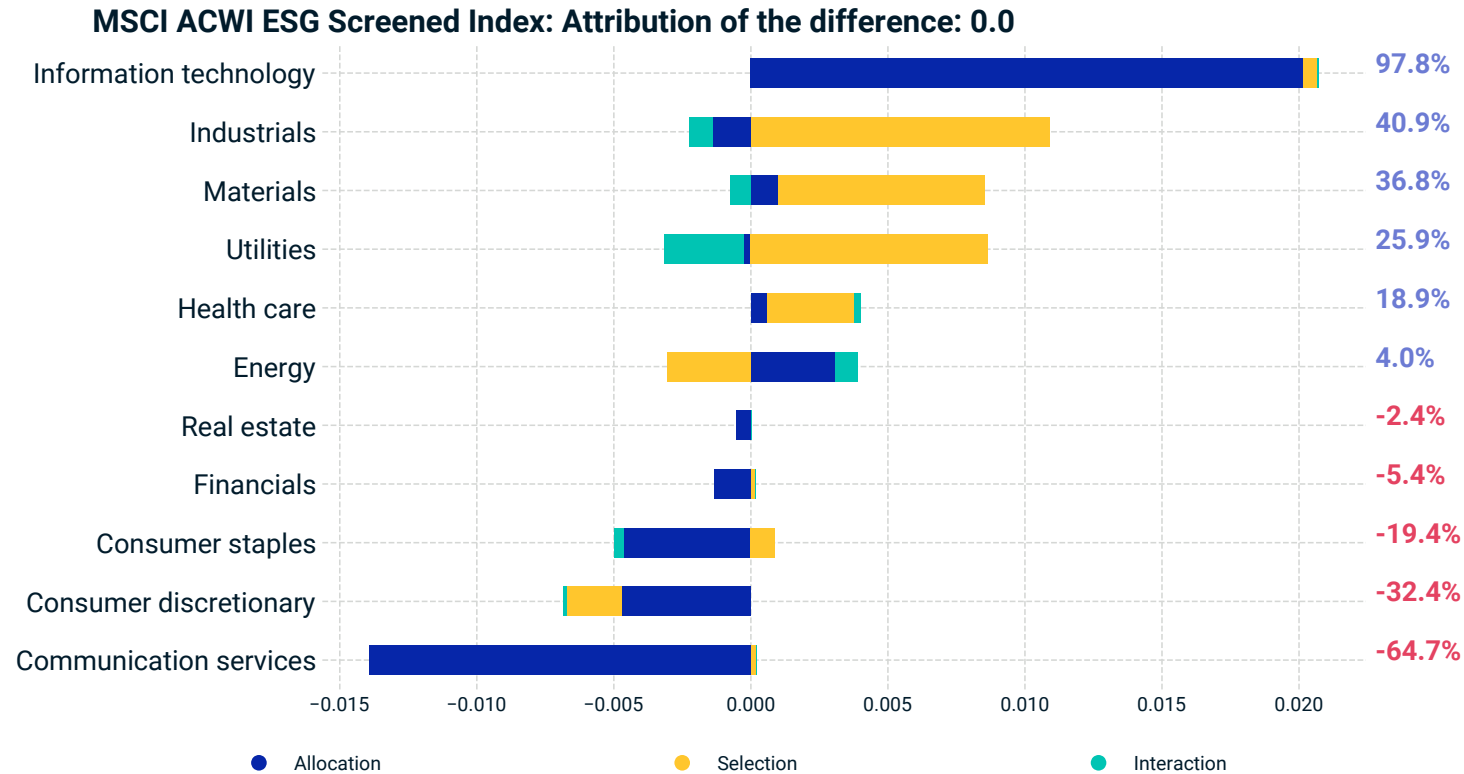
Top Country Exposure

	ACWI	ACWI ESG Screened	ACWI ESG Universal	ACWI ESG Leaders	ACWI ESG Focus	ACWI Sri
USA	64.4	64.7	60.7	64.6	63.2	62.2
Japan	5.2	5.4	6.0	5.6	5.6	5.8
United Kingdom	3.4	3.2	4.4	3.3	3.4	2.9
Canada	2.7	2.5	3.3	2.7	3.3	3.4
France	2.6	2.5	3.0	2.6	2.4	2.1

Country exposures of ACWI ESG Indexes for the top 5 country exposures of MSCI ACWI Index.

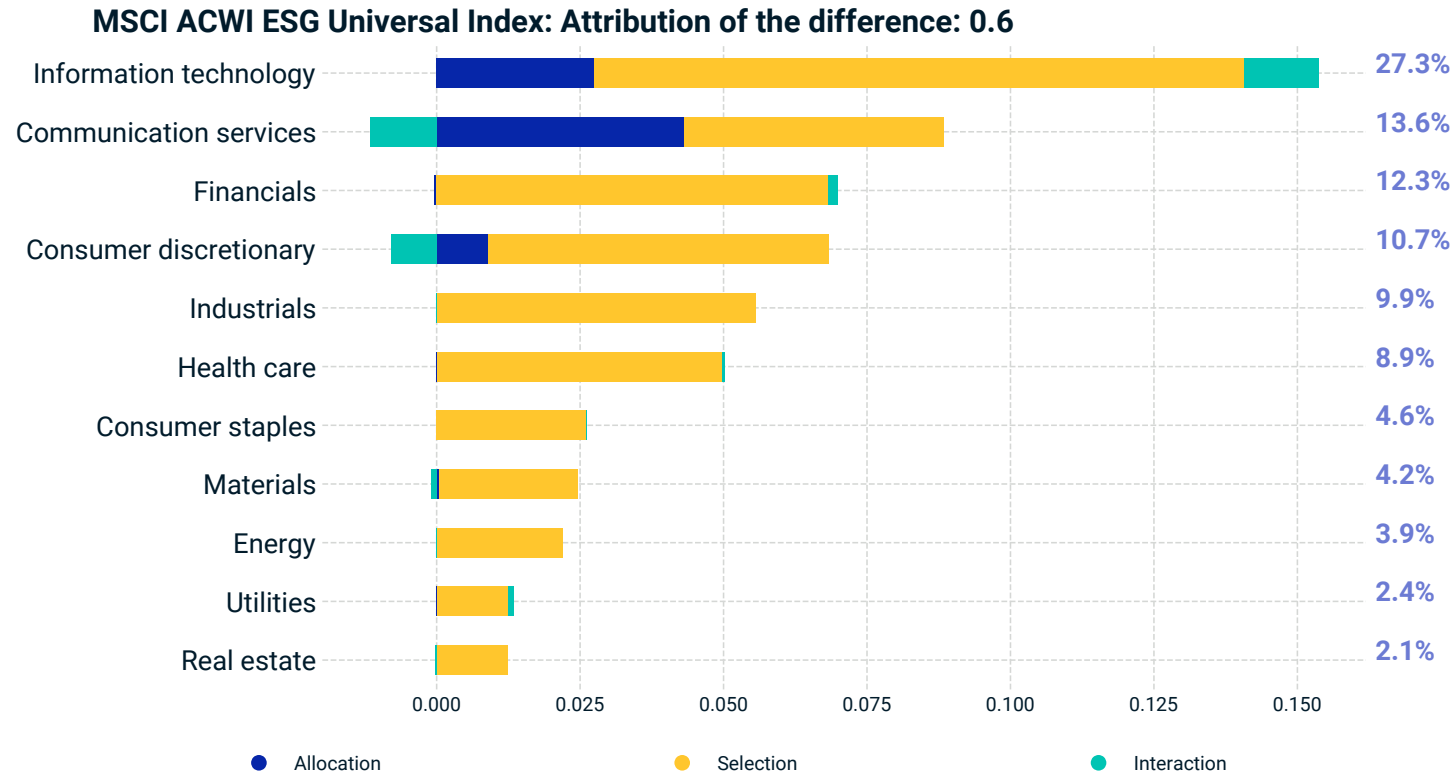
As of Aug 30, 2024

Brinson Attribution - ESG Score Improvement



Brinson Attribution based on difference between ESG Scores of ACWI ESG Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the ESG improvement of the respective ACWI ESG Index relative to MSCI ACWI Index

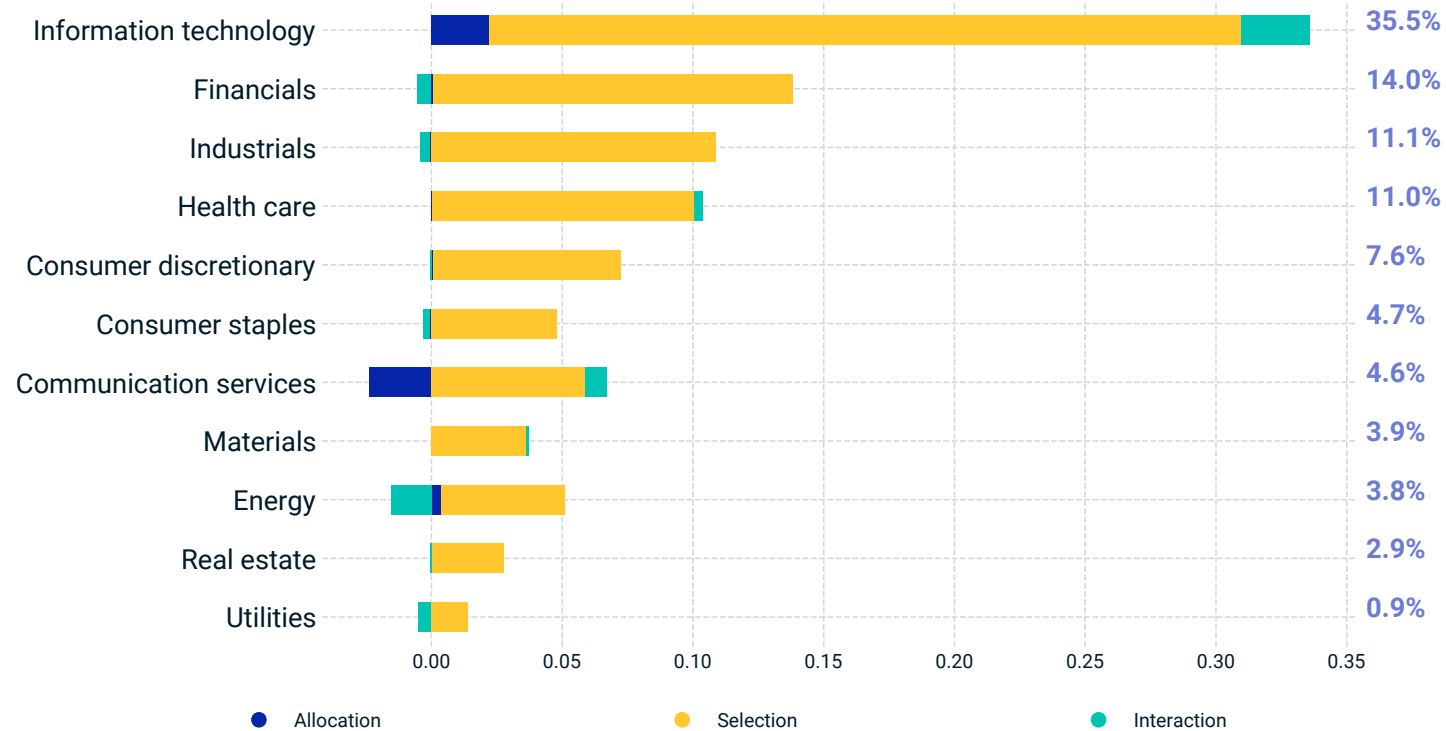
Brinson Attribution - ESG Score Improvement



Brinson Attribution based on difference between ESG Scores of ACWI ESG Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the ESG improvement of the respective ACWI ESG Index relative to MSCI ACWI Index

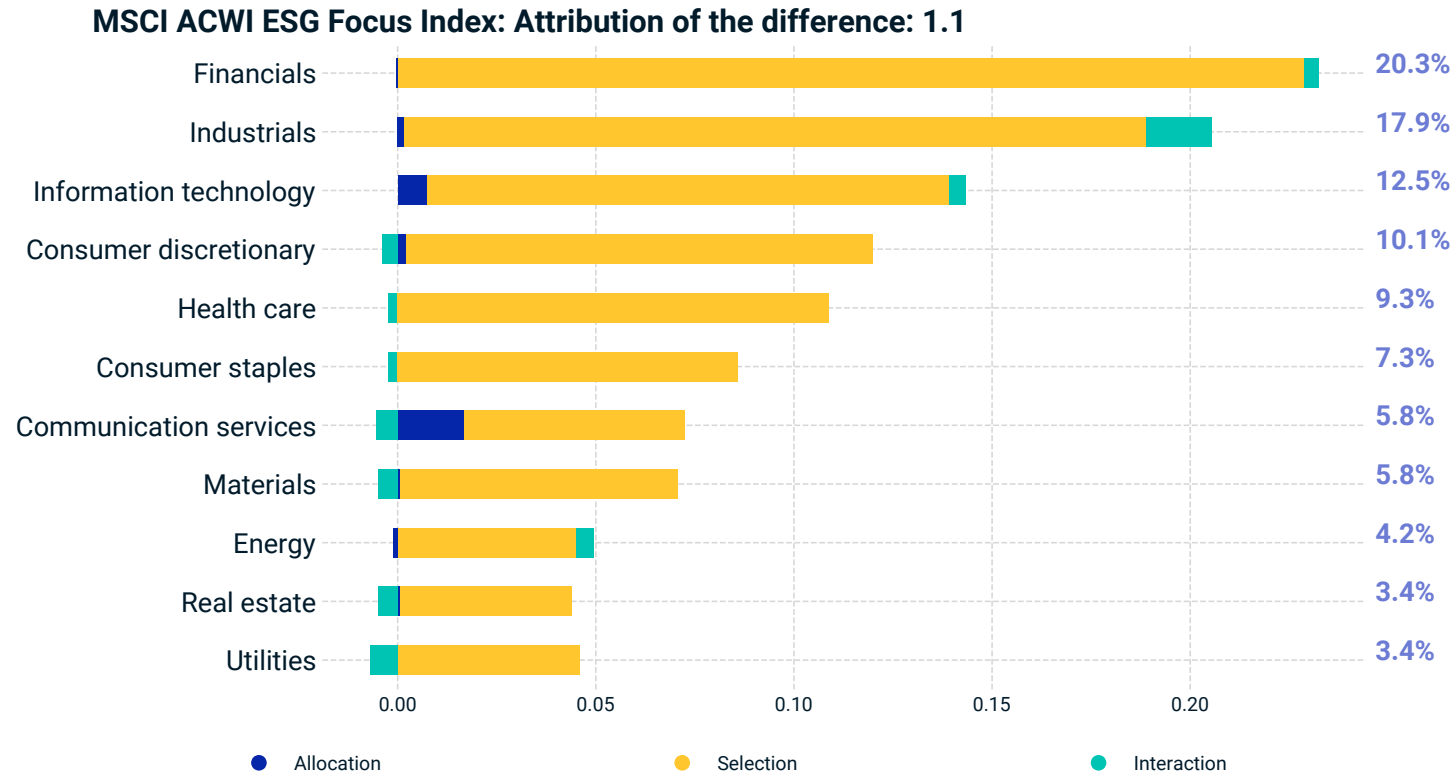
Brinson Attribution - ESG Score Improvement

MSCI ACWI ESG Leaders Index: Attribution of the difference: 0.9



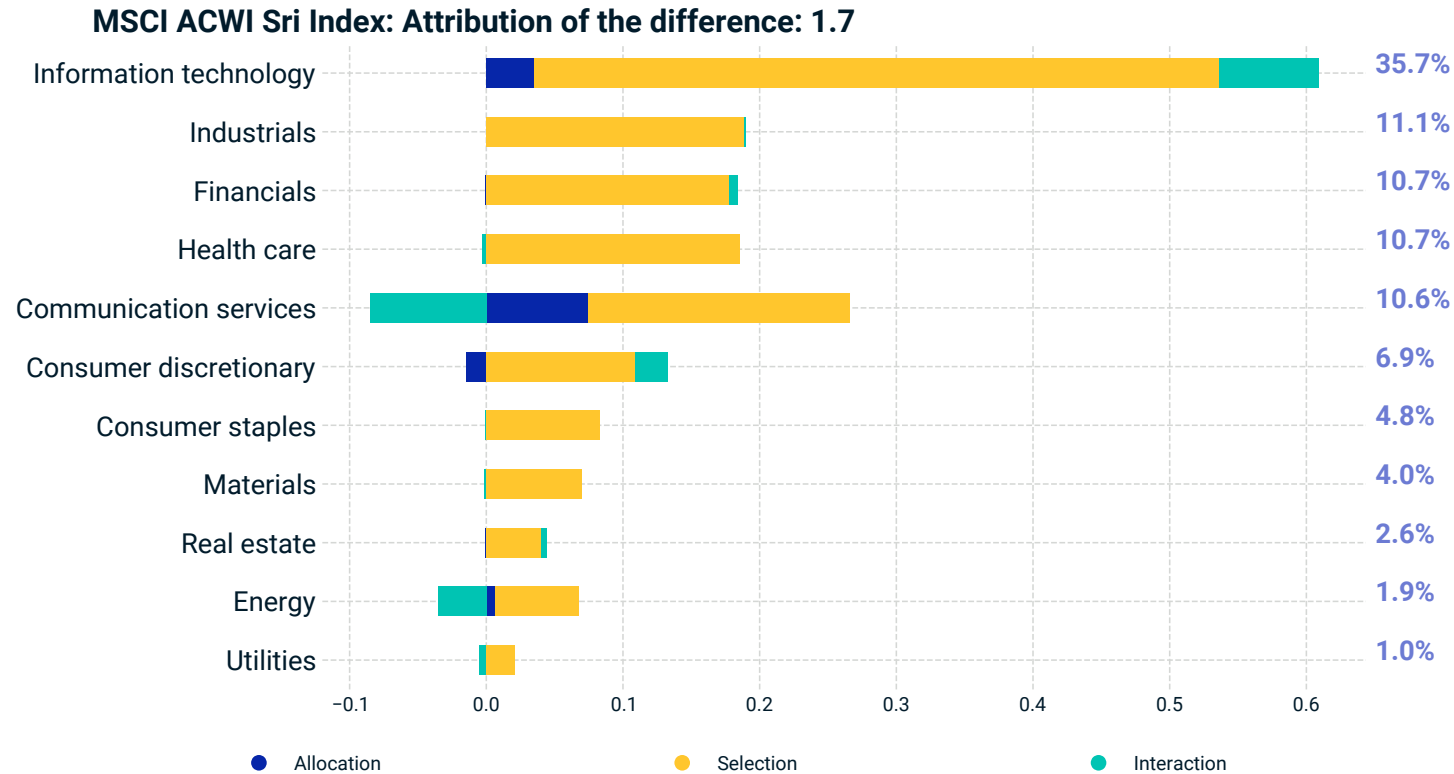
Brinson Attribution based on difference between ESG Scores of ACWI ESG Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the ESG improvement of the respective ACWI ESG Index relative to MSCI ACWI Index

Brinson Attribution - ESG Score Improvement



Brinson Attribution based on difference between ESG Scores of ACWI ESG Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the ESG improvement of the respective ACWI ESG Index relative to MSCI ACWI Index

Brinson Attribution - ESG Score Improvement



Brinson Attribution based on difference between ESG Scores of ACWI ESG Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the ESG improvement of the respective ACWI ESG Index relative to MSCI ACWI Index

EFMGEMLT Performance Attribution

Performance Attribution

	MSCI ACWI ESG Screened	MSCI ACWI ESG Universal	MSCI ACWI ESG Leaders	MSCI ACWI ESG Focus	MSCI ACWI ESG Sri
Total	9.9	10.0	9.8	10.0	10.4
Benchmark	9.6	9.6	9.6	9.6	9.6
Active	0.3	0.4	0.2	0.4	0.8
Specific	0.1	0.1	-0.0	0.2	0.8
Currencies	0.0	-0.2	-0.0	-0.0	-0.1
Common factor	0.1	0.5	0.3	0.3	0.1
Countries	0.0	0.0	0.0	0.0	0.0
Industries	0.1	0.1	0.0	-0.0	-0.1
Styles	0.0	0.3	0.2	0.3	0.3
ESG	0.0	0.1	0.2	0.2	0.3

Nov. 29, 2013 to Aug 30, 2024, with monthly data.

Appendix: ESG: Integration, values and norms

	Definition
ESG score	Weighted average ESG Score. The ESG Score indicates how well the index companies manage their most material ESG risks relative to sector peers. Scores range from 10 (best) to 0 (worst).
ESG leaders (AAA-AA) (%)	Exposure to companies with an ESG rating of AAA or AA (best in class relative to peers).
ESG laggards (B-CCC) (%)	Exposure to companies with an ESG rating of B or CCC (worst in class relative to peers).
ESG trend positive (%)	Exposure to companies with a rating upgrade in the year prior to the most recent ESG rating.
ESG trend negative (%)	Exposure to companies with a rating downgrade in the year prior to the most recent ESG rating.
Index ESG rating	The letter rating equates the ESG Score.
Environmental pillar score	The Environmental Pillar Score indicates how well the index companies manage their most material environment risks. Scores range from 10 (best) to 0 (worst).
Social pillar score	The Social Pillar Score indicates how well the index companies manage their most material social risks. Scores range from 10 (best) to 0 (worst).
Governance pillar score	The Governance Pillar Score indicates how well the index companies manage their most material governance risks. Scores range from 10 (best) to 0 (worst).
Tobacco involvement (%)	Exposure to companies flagged for involvement in tobacco. Specifically, tobacco producers and companies that derive 5% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of tobacco products, as defined by the methodology of the MSCI Global ex Tobacco Involvement Indexes.
Civilian firearms producers (%)	Exposure to civilian firearms producers.
Ties to controversial weapons (%)	Exposure to companies with ties to controversial weapons. MSCI ESG Research's Controversial Weapons definition covers cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, non-detectable fragments and incendiary weapons, as defined by the methodology of the MSCI Global Ex-Controversial Weapons Indexes.
Global compact compliance violation (%)	Exposure to companies in violation of the UN Global Compact principles.
Red flag controversies (%)	Exposure to companies with environment-, governance-, customer-, human rights-, or labor rights-related controversies that are assessed as "Very Severe".
Orange flag controversies (%)	Exposure to companies with ongoing environment-, governance-, customer-, human rights-, or labor rights-related controversies that are assessed as "Severe" and indicate structural problems at the company.

Appendix: ESG: Climate change

	Definition
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	Scope 1 + Scope 2 Carbon emissions normalized for the index.
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	Efficiency of the index in terms of total Scope 1 and Scope 2 carbon emissions divided by total sales.
Wtd avg carbon intensity (t CO2e/\$M sales)	Exposure to carbon intensive companies based on Scope 1 and Scope 2 emissions.
Low carbon transition score	Weighted average low Carbon Transition (LCT) score measuring companies' level of alignment to the LCT. Companies with higher LCT score are more aligned with the LCT compared to the companies with lower scores. Scores range from 0 to 10.
Solutions (%)	Exposure to companies involved in low/zero carbon solutions that would have negative total carbon intensity and are likely to benefit in a low carbon scenario.
Product & operational transition (%)	Exposure to companies with moderately to highly carbon intensive products or operations. Such companies' products or operations could go under transition in a low carbon scenario.
Asset stranding (%)	Exposure to companies with very high risk exposure to transition risk and may face asset stranding risk in the short to medium term.
Potential carbon emissions (t CO2e/\$M invested)	Carbon potential emissions normalized for the index.
Fossil fuel reserves (%)	Exposure to companies that own proved & probable coal and/or oil and natural gas reserves used for energy purposes. The definition is based on the MSCI Global Ex-Fossil Fuel Indexes Methodology.
Thermal coal mining (%)	Exposure to companies that derive some of their revenue from thermal coal mining.
Thermal coal-based power generation (%)	Exposure to companies that derive some of their revenue from thermal coal-based power generation.
Unconventional oil & gas extraction (%)	Exposure to companies that derive revenues from unconventional oil and gas including oil sands, oil shale, shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production.
Clean technologies solutions (> 20% revenue)	Exposure to companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
Clean technologies solutions revenue (wtd avg %)	Weighted average % revenue derived from any of the five clean tech themes including alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
Green/fossil fuel-based net revenue exposure	The ratio of the weighted average clean technologies solutions revenue (%) or "Green Revenue" to the weighted average fossil fuel revenue (%) defined as the weighted average % revenue derived from any of the fossil fuel-related activities including thermal coal mining, oil and gas extraction, thermal coal-based power generation, and oil and gas-based power generation.
Exposure to carbon-related assets (%)	Exposure to companies that belong to the following GICS industries: Energy Equipment & Services (101010), Oil, Gas & Consumable Fuels (101020), Electric Utilities (551010), Gas Utilities (551020), Multi-Utilities (551030).
Climate-related controversies (% , score ≤ 4)	Exposure to companies with climate change and energy-related controversies that are flagged as Red, Orange and Yellow, covering scores 0 to 4. Factors affecting this evaluation include a history of involvement in GHG-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
Low carbon transition management score (% top quartile)	Exposure to companies that belong to the top quartile in terms of their Low Carbon Transition Management Score relative to companies in the relevant GICS Sub-Industry that are constituents of the MSCI ACWI IMI.

Appendix: ESG: Climate change

	Definition
Carbon Intensity to EVIC - Scope 1 + 2 + 3	Weighted average Scope 1, Scope 2 and Scope 3 carbon emissions intensity normalized by enterprise value including cash. (Unit: tons of CO2/ \$ million enterprise value including cash)
Carbon Intensity to EVIC - Scope 1 + 2	Weighted average Scope 1 and Scope 2 carbon emissions intensity normalized by enterprise value including cash. (Unit: tons of CO2/ \$ million enterprise value including cash)
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	Efficiency of the index in terms of total Scope 1 and Scope 2 carbon emissions divided by total sales.
Carbon Emissions to Sales - Scope 1 + 2 + 3	Weighted average Scope 1, Scope 2 and Scope 3 carbon emissions intensity normalized by sales. (Unit: tons of CO2/ \$ million sales)
Carbon Emissions to Sales - Scope 1 + 2	Weighted average Scope 1 and Scope 2 carbon emissions intensity normalized by sales. (Unit: tons of CO2/ \$ million sales)
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	Scope 1 + Scope 2 Carbon emissions normalized for the index.
Companies Reporting scope 12 emissions (%)	Exposure to companies with Scope 1 and Scope 2 carbon intensities.
Potential carbon emissions (t CO2e/\$M invested)	Carbon potential emissions normalized for the index.
Fossil fuel reserves (%)	Exposure to companies that own proved & probable coal and/or oil and natural gas reserves used for energy purposes. The definition is based on the MSCI Global Ex-Fossil Fuel Indexes Methodology.
Thermal coal mining (%)	Exposure to companies that derive some of their revenue from thermal coal mining.
Unconventional oil & gas extraction (%)	Exposure to companies that derive revenues from unconventional oil and gas including oil sands, oil shale, shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production.
Low carbon transition score	Weighted average low Carbon Transition (LCT) score measuring companies' level of alignment to the LCT. Companies with higher LCT score are more aligned with the LCT compared to the companies with lower scores. Scores range from 0 to 10.
Solutions (%)	Exposure to companies involved in low/zero carbon solutions that would have negative total carbon intensity and are likely to benefit in a low carbon scenario.
Product & operational transition (%)	Exposure to companies with moderately to highly carbon intensive products or operations. Such companies' products or operations could go under transition in a low carbon scenario.
Asset stranding (%)	Exposure to companies with very high risk exposure to transition risk and may face asset stranding risk in the short to medium term.

Appendix: ESG: Climate change

	Definition
Clean technologies solutions (> 20% revenue)	Exposure to companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
Green Revenues (wtd avg %)	Weighted average of index constituents' percentage of revenue derived from alternative energy, energy efficiency, green building, pollution prevention, sustainable water, or sustainable agriculture.
Count of Companies with Green Business >= 20%	Number of companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
Green/fossil fuel-based net revenue ratio	The ratio of the weighted average clean technologies solutions revenue (%) or "Green Revenue" to the weighted average fossil fuel revenue (%) defined as the weighted average % revenue derived from any of the fossil fuel related activities including thermal coal mining, extraction, production and mining of conventional and unconventional oil and gas, thermal coal based power generation, liquid fuel based power generation and natural gas based power generation.
Companies with GHG emissions reduction targets (%)	Exposure to companies with carbon emissions reduction target/s.
Companies with SBTi-approved targets (%)	Exposure to companies with one or more active carbon emissions reduction target/s approved by the Science Based Targets initiative (SBTi).
Count of Companies with approved SBTi	Number of companies with one or more active carbon emissions reduction target/s approved by the Science Based Targets initiative (SBTi).
Thermal Coal (%)	Exposure to companies with that derive any revenues from thermal coal power generation.
Renewables (%)	Exposure to companies with that derive any revenues from renewable power generation.
Liquid Fuel (%)	Exposure to companies with that derive any revenues from liquid fuel power generation.
Thermal Coal (GWh)	Weighted average power generation output (in GWh) from thermal coal.
Renewables (GWh)	Weighted average power generation output (in GWh) from renewables.
Liquid Fuel (GWh)	Weighted average power generation output (in GWh) from liquid fuels.

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit www.msci.com.

Contact us

AMERICAS		EUROPE, MIDDLE EAST & AFRICA		ASIA PACIFIC	
Americas	+ 1 888 588 4567 *	Cape Town	+ 27 21 673 0100	China North	10800 852 1032 *
Atlanta	+ 1 404 551 3212	Frankfurt	+ 49 69 133 859 00	China South	10800 152 1032 *
Boston	+ 1 617 532 0920	Geneva	+ 41 22 817 9777	Hong Kong	+ 852 2844 9333
Chicago	+ 1 312 675 0545	London	+ 44 20 7618 2222	Mumbai	+ 91 22 6784 9160
Monterrey	+ 52 81 1253 4020	Milan	+ 39 02 5849 0415	Seoul	00798 8521 3392 *
New York	+ 1 212 804 3901	Paris	0800 91 59 17 *	Singapore	800 852 3749 *
San Francisco	+ 1 415 836 8800			Sydney	+ 61 2 9033 9333
São Paulo	+ 55 11 3706 1360			Taipei	008 0112 7513 *
Toronto	+ 1 416 628 1007			Thailand	0018 0015 6207 7181 *
* = toll free msci.com clientservice@msci.com esgclientservice@msci.com				Tokyo	+ 81 3 5290 1555

Notice & Disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.